

AMENDMENTS

Please amend the claims as follows:

I claim:

1 1. (amended) A brake disk for use with a disk brake system having brake
2 pads for axially engaging the disk, comprising:

3 a disk member [~~axially~~] arrayed about a central axis and having an outer
4 rim and an inner rim, and an obverse face and a reverse face arrayed about a
5 disk plane, wherein

6 each said obverse face and reverse face is provided with circumferentially
7 alternating protruding segments and indented segments, arranged in such a
8 manner that said disk plane is entirely contained in the material of the disk
9 throughout the intersection therewith, with said protruding segments being
10 adapted for physically engaging the brake pads.

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1 2. (original) The brake disk of claim 1, wherein

2 each said protruding segment includes a leading edge for gripping the
3 brake pad upon engagement.

1 3. (amended) The brake disk of claim 2, wherein
2 each said leading edge has an angle of incidence with the brake pad in the
3 range between ~~[+45]~~ 0° and -45° .

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1 4. (original) The brake disk of claim 1, wherein
2 each said indented segment is open to said outer rim and said inner rim
3 such that air flow is facilitated therethrough.

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1 5. (original) The brake disk of claim 1, wherein
2 each of said outer rim and said inner rim is scalloped in shape to provide
3 increased surface area for heat dissipation.

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1 6. (original) The brake disk of claim 1, wherein
2 each said protruding segment is circumferentially wider than the adjacent
3 indented segments.

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1 7. (amended) The brake disk of claim 6, wherein
2 ~~[The]~~ the circumferential width ~~[ratio]~~ ratio of said indented segments to

said protruding segments is in the range of 10% to 40%.

8. (amended) In a disk braking system for use in transrotary motion applications, including brake pads for engaging the surface of a brake disk the improvement comprising:

providing the brake pad engaging surface of the brake disk with alternating protruding segments for engaging the brake pads and indented segments for facilitating cooling, with a bisecting disk plane situated so as lie entirely the material of the disk throughout the ring of intersection therewith.

9. (original) The improvement of claim 8, wherein

each said protruding segment is circumferentially wider than the adjacent ones of said indented segments.

10. (amended) The improvement of claim 9, wherein

each said indented segment has circumferentially width of less than 40% of that of said protruding segments [segments].

1 11. (amended) The improvement of claim 8, and further including
2 an irregularly shaped outer rim and an irregularly shaped inner rim such
3 that expanded surface area ~~in~~ is provided to aid heat dissipation therefrom.

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1 12. (original) The improvement of claim 8, and further providing that
2 the opposing axial surfaces of the disk both include alternating protruding
3 segments and indented segments and the indented segments on one surface are
4 situated axially opposite protruding segments on the opposing surface.

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1 13. (original) The improvement of claim 8, wherein
2 each said protruding segment is circumferentially wider than the adjacent
3 ones of said indented segments.

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1 14. (original) The improvement of claim 8, wherein
2 each said protruding segment has a leading edge for engaging with and
3 gripping the surface of the brake pad.
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15. (amended) The improvement of claim 14, wherein

~~{Each}~~ each said leading edge is adapted to engage the brake pad at a radial angle of less than 45 degrees.